

1842-0029

IN THE SPECIFICATION:

Please replace the first full paragraph on page 2 spanning lines 4-15 with the following amended paragraph:

Drawing from the approaches developed for intradiscal arthroplasty, efforts have made to develop an extradiscal arthroplasty. These systems offer the advantage of "soft stabilization" that limit, rather than eliminate, spinal segment motion. Current theories suggest that preventing movement of the spinal segments may not be a significant factor in clinical success of spinal stabilization systems. Instead, these theories focus on creating a normal loading pattern for the spine as a primary vehicle for successful spinal instrumentation. Thus, the ~~goals~~ goal for dynamic stabilization has been to restrict movement of the spine to a zone or range where normal or near normal loading of the spinal segments can occur. At the same time, dynamic stabilization techniques have sought to prevent the spine from adopting a position or orientation where abnormal loading of the spine can occur.

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Please replace the paragraph spanning from page 9, line 26, to page 10, line 10, with the following amended paragraph:

Connectors and bone anchors for a generally rigid fixation are well known. Connectors providing dynamic stabilization may be constructed in accordance with the embodiments disclosed herein. For instance, in one embodiment, a connector **10**, depicted in **FIG. 2**, includes a bone anchor **12** that is in the form of a bone screw with bone engaging threads **13**. The bone anchor **12** includes an intermediate platform **15** from which projects a post **16**. The post **16** includes a non-threaded portion **17** and ~~terminate~~ terminates in a threaded portion **18**. The threaded portion **18** preferably carries machine threads for engaging a threaded nut **20**. As thus far described, the bone anchor is constructed similar to the bone screw described and illustrated in U.S. Patent No. 4,836,196 to Park et al., the disclosure of which is incorporated herein by reference. It is understood that the post **16** can include an internal or an external driving feature (not shown) for engagement by a tool to thread the bone threads **13** into a vertebra. It is also contemplated that a locking nut is provided that can lock the position of nut **20** on the bone anchor **12**.

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Please replace the first paragraph on page 13 spanning lines 1-10 with the following amended paragraph:

In the embodiment illustrated in **FIG. 2**, the bearing element **27** is spherical and the race **29** defines a an articulating surface. Thus, with this embodiment, the connector nominally permits relative movement between the rod **R** and the bone anchor **12** (and consequently the instrumented vertebra) in several degrees of freedom and in several planes that intersect the plane of the rod and bone anchor. Thus, while the pivot arrows in **FIG. 2** reside in the rod/bone anchor plane, the bone anchor can also pivot along transverse planes projecting out of the paper. In many stabilization constructs, the dynamic stabilization is limited to specific planes or degrees of freedom, and most particularly to the rod/bone anchor plane (i.e., the plane of the paper in **FIG. 2**).